

VITA

Virginia Base Mapping Program (VBMP)

Proposed Rates for Selected Geospatial Enterprise Services:

(Road Centerline (RCL), Digital Orthographic (DO) Imagery, Geospatial Enterprise Platform (GEP))

A. Background Information

In 2001, the Wireless E-911 Services Board provided \$9.8 million to the Virginia Geographic Information Network (VGIN), a division of one of VITA's predecessor agencies, to acquire high resolution digital orthophotographic imagery for the entire Commonwealth. VGIN was able to fully fund the first digital orthophotographic effort with a one-time fund balance.

The Wireless E-911 Services Board needed this digital orthophotography product as a resource for local public safety answering points (PSAPs) who must be able to locate 9-1-1 callers with wireless devices. For that reason, within its initial investment, the Wireless E-911 Services Board also funded the development of a companion statewide digital road centerline (RCL) file that provides a single, integrated street file with addressing information compiled from over 150 source agencies throughout the Commonwealth.

The value of this data, which represents a snap shot in time, also degrades with time. With growth and development, the imagery provides a less and less accurate view of the environment and thus must be repeated every four years.

While the Wireless E-911 program has continued to support the geospatial program, it can no longer fully fund the cost of a statewide update. As a result, when it was time to repeat the digital orthophotography in 2006, general fund appropriations were approved by the General Assembly to augment the annual Wireless E-911 funding, with the understanding that, via Item 421 C of the Appropriation Act, an ISF rate structure would be established to fund this effort in the future.

B. Product Recommendation

The proposed rates to support the Commonwealth's geospatial program can be broken down into four initiatives:

- Road Centerline (RCL) - \$350 per month per use or application
- Digital orthophotography (DO) imagery (Statewide): High-Resolution - \$667 per month per use or application; Low-Resolution - \$2,500 per month (unlimited users) – Areas less than the entire state would be charged based on the percentage of that area to the state at 10% increments.
- Geospatial Enterprise Platform (GEP) — i.e., the hardware, software and networking that provides the data to customer agencies - \$200 per month per use or application/data layer (10 uses/data layers maximum)
- Coordination of data sharing and development – cost included in other initiatives – no specific rate

These costs are calculated on projected agency use based on historical usage patterns. However, since agencies have not had to fund these initiatives in the past, usage patterns may change as agencies perform cost benefit analyses. If agency participation reduces, options exist to reduce imagery resolution and frequency of acquisition to better match the value shown to the user agencies (including localities).

Another potential is that additional agencies will choose to participate and will seek geospatial services. Additionally, there is some potential to market these initiatives to commercial entities. Expansions into new agencies and commercial entities will take time to evolve and additional funding will be necessary to expand the platform to meet demand. However, over the long term, greater participation will cause these rates to reduce.

The following is a list of expected agency participation:

Agency	Amount
Transportation	\$538,000
Forestry	\$58,200
Mine, Minerals, Energy	\$58,200
Conservation & Recreation	\$58,200
Environmental Quality	\$58,200
Economic Development	\$58,200
Emergency Management	\$58,200
Health	\$58,200
Game & Inland Fishery	\$58,200
VSP	\$160,000
SBE	\$41,400
COVF	\$4,800
E-911	\$1,725,400

It should also be noted that the proposed rates are exclusive of fees for hosting agency-specific GIS applications and associated databases, which are covered, as with other applications, under other applicable VITA rate structures.

C. Investment Requirement

The projected annual costs to support the Commonwealth's geospatial program are as follows:

Initiative	Cost
Road Centerline (RCL)	\$578,924
DO Imagery	\$1,863,113
Operating Costs	\$316,231
Coordination	\$157,449
Overhead*	\$165,163
Annual Total Cost	\$3,083,020

*Overhead represents 6% of total existing costs

D. Customer Agency Benefits

In the past, VITA has provided GIS data and services at no cost to agencies due to the initial DO Imagery project being fully funded by the Wireless E-911 program (\$9.8 million), and the current DO Imagery project being funded by the Wireless E-911 program (\$1.6 million) and general fund appropriations (\$4.1 million). Additionally, VITA has had an annual general fund appropriation that covered the cost of the other initiatives up to this point. Since passage of the budget bill in June, VITA has consulted with state agencies using GIS data regarding the requirement to establish an Internal Service Fund rate for geospatial services.

Though several agencies have indicated they were anticipating the imposition of fees, few agencies believe they have any capacity in their budget to add these costs and are planning on budget request amendments to support them. Natural Resources agencies, which are large consumers, have relatively small budgets, relying heavily on grants that are not a consistent source of funding. Other agencies, such as those in Health and Human Resources and Public Safety, rely heavily on grants that may have been viewed in the past as more stable but recently have been subject to reduced funding from the federal level.

Though most costly, the DO Imagery is the core of the geospatial platform. It not only provides the visual context of the geographic features throughout the Commonwealth, but also serves as the base for all further geospatial development. Through the establishment of a common base for geospatial development, it provides a de facto standard that ensures that all new data will integrate and overlay properly.

Other benefits of the enterprise approach to geospatial data include:

1. Cost of entry and monthly recurring costs to agencies is minimal for the enterprise data layers.
2. VITA has a centralized, shared geospatial platform in place for hosting data and applications.
3. Costs to agencies for on-going maintenance of data and platform are significantly reduced over available commercial services.

E. Recommended Motion

1. I move that the Finance and Audit Committee recommend that the ITIB approve the proposed Selected Geospatial Enterprise Services rates for submission to JLARC.